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# Cambodia

*Pisey Oum*

## SUMMARY

In February, 1995, Cambodia became a signatory to the Convention on Biological Diversity (CBD). In 1997 a National Biodiversity Prospectus was prepared as a guide and framework for a National Biodiversity Strategy and Action Plan (NBSAP). A National Environment Action Plan (NEAP) for the period 1998–2002 was formally adopted by government in 1998, but it gives limited coverage to biodiversity issues, particularly in the key fields of forestry and fisheries. The NBSAP process, funded through the Global Environment Facility (GEF), began in April 2000 with the preparation of a national biodiversity status report. The NBSAP is expected to fit within the framework of the NEAP and be approved by government by mid-2002, five years after the initial Cambodian request to the GEF for assistance.

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## Key issues

Although the legislative framework relating to environmental protection and biodiversity conservation continues to strengthen, law enforcement and effective implementation of national action plans remain weak. The government places a low priority on the environment compared to other national development concerns. Cambodia's framework environmental legislation, the 1996 Law on Environmental Protection and Natural Resource Management, is a watered down version of stronger earlier drafts. The later EIA legislation is also weak.

It is proving difficult to achieve coordination and cooperation among the parties responsible for biodiversity conservation. It may be more appropriate and effective to provide funding support and technical assistance to develop and implement biodiversity management strategies under each sector and for each region. Without national initiatives, however, biodiversity protection will remain weak.

Continued exploitation of forest resources and wildlife by armed personnel, powerful individuals and groups and local communities makes it difficult to

conserve Cambodia's valuable and unique biodiversity. With political stability and increasing government willingness to enforce the laws, however, the situation is improving. A strong and sustained commitment is required from the Royal Government of Cambodia (RGC) to provide the necessary resources for enforcement, training of field conservation workers and awareness-raising programs that will prevent the destructive exploitation of forest resources and wildlife.

Cutting of the flooded forest around the Tonle Sap Great Lake and along the Mekong River is destroying waterfowl habitat and contributing to sedimentation and water pollution, particularly at the Boeung Chhmar Ramsar site and three proposed biosphere reserves. This leads to the occupation of cleared areas by farmers and irreversible losses of biodiversity. Logging on the upper reaches of the Mekong River watershed in the vicinity of Stung Treng also has a negative impact on the Ramsar site there.

Destruction of mangrove forests and clearing coastal swamp forest for shrimp farming is causing extensive damage. These activities have eliminated the Peam Krasaop Wildlife Sanctuary (including Koh Kapik, one of Cambodia's three Ramsar Sites) as wildlife habitat.

It is essential that all key stakeholders, including government, private, local communities and NGOs, participate in the preparation of Cambodia's NBSAP and that the process benefits from lessons learned in the preparation of action plans in other countries.

### Introduction

Cambodia is one of several South East Asian countries located along the Mekong River. The country covers an area of 181,035 sq. km and has a population of 11.4 million, 80 per cent of whom live in rural areas as subsistence farmers. Forest is the dominant vegetation, covering about 58 per cent of the country. Wetlands cover 30 per cent of the land area; about 20 per cent are of international importance, including Tonle Sap Great Lake, the largest lake in South East Asia. Tonle Sap and its floodplain support nearly 30 per cent of the population. Overall, around 95 per cent of Cambodians live within the inland wetlands (NEAP1998 and Final Draft National Wetland Action Plan, 2000).

Cambodia's diverse ecosystems provide it with a rich biodiversity, consisting of 212 species of mammals, 720 species of birds, 240 species of reptiles, and 435 species of marine fish. About one third of the 15,000 plant species are endemic. Cambodia is one of the world's richest countries in terms of diversity of plant families (NEAP 1998; Ashwell 1997).

In 1993, over 18 per cent of the country was set aside in 23 protected areas, one of the largest national systems in Asia in terms of proportion of land area. Most protected areas exist on paper only, however, and pressure on biodiversity resources continues to be acute. Over the past 20 years, forest area has shrunk by 12 per cent. Although this is a relatively low level of loss by Asian standards, the country faces a more serious problem: the diminished quality of some 50 per cent of remaining forests, degraded by war, expansion of agriculture and wood harvesting. Legal and illegal logging by international and national forest companies have left forest biodiversity greatly depleted (Royal Decree 1993 and NEAP 1998).

Wood is the main source of fuel and firewood is the most common form of wood harvested from accessible forests. In 1994, biomass accounted for 86 per cent of total energy consumed (fuelwood was 82.8 per cent, charcoal 1.6 per cent and farming residues 1.8 per cent; the remaining 14 per cent came from commercial sources of oil, gas and electricity). The government, with assistance from NGOs, is taking measures to reduce biomass loss through establishment of forest plantations, community forestry, agroforestry and by increasing production and improving access to electricity and gas (NEAP 49).

Poaching wildlife for family meat consumption puts pressure on the maintenance of biodiversity as does the growing illegal export trade in mammals, birds and reptiles. These activities routinely take place in poorly managed protected areas, wetland areas and forest reserves. The illegal trade and widespread destruction of habitat through destructive logging practices have their origins in poverty, poor enforcement and coordination, and limited funding available to government.

### Poverty

Most farmers, soldiers, militia, police and civil servants are poor. In 1999, about 36 per cent of the population lived below the poverty line, earning less than US\$1 per day. This compares to 39 per cent in 1993. People in all sectors of society know they must rely on their own initiative and not on the meagre assistance of government to satisfy their basic needs and protect their property. This is particularly the case in remote areas dependent on subsistence farming activities such as raising poultry and rice production. Local people rely on other options to supplement their livelihood, including fishing and hunting wildlife for food and sale. Collecting non-timber forest products is also important, particularly for local communities living near or inside forest land and protected areas. They have witnessed the wholesale destruction of what were once community forests by logging companies protected by power-

ful persons, and no longer have incentives to use forest products sustainably. Property rights and legal registration of property are still in chaos, although in 2001 the RGC introduced the Land Law, which establishes private property rights and a process for the legal registration of property (UNDP/GEF-Mekong River Basin Wetland Biodiversity Conservation and Sustainable Use Program Proposal 2000 and DANIDA-Natural Resources and Environmental Program Proposal 2000).

### Poor law enforcement

Even though Cambodia has introduced several laws to protect and conserve its remaining biodiversity, trade in wildlife is barely controlled and officers at border checkpoints are often bribed to release wildlife and plant products. Moreover, in some restaurants in Cambodia, especially in the capital, Phnom Penh, and provinces attracting tourists, wildlife (including waterfowl, bears, deer, and bunting) are usually on the menu despite a law banning consumption of rare or endangered animals.

### Lack of coordination among involved agencies

There is little coordination of the management and protection of biodiversity resources among line ministries and departments. Confusion and competition over mandates leads to poor performance and lack of commitment. Salaries remain low, forcing officials to take up additional occupations that distract from, and sometimes conflict with, their duties.

### Lack of finance

Government budget allocations to environment management do not even cover basic staffing and maintenance costs. For example, until 1999 few protected areas had trained staff on site. Now all areas have contracted park staff but salary levels are around \$10 per month. Only two protected areas — Ream and Bokor national parks — have management plans.

The Ministry of Environment is the central agency responsible for biodiversity conservation, while the Ministries of Agriculture, Forestry and Fisheries, Water Resources, and Public Works and Transportation have mandates to administer and implement some key aspects of biodiversity protection according to guidelines outlined in the National Environmental Action Plan. NGOs and intergovernmental institutions, such as the Mekong River Commission (MRC), act as catalysts by monitoring the effectiveness of implementing the NEAP.

## Key institutions and policies

Cambodia has adopted a broad range of international policy instruments that are helping define national policy responses and actions to protect its extensive biodiversity resources. In February 1995, two years after the Ministry of Environment (MOE) was established, Cambodia joined the CBD. In the same year it became a member of the Coordinating Body of the Seas of East Asia (COBSEA). In 1997, Cambodia signed the CITES Convention and the UNESCO agreement on Man and Biosphere Reserves; two years later it became a signatory to the Ramsar Convention.

MOE is the focal agency for CBD issues and is responsible for coordinating its implementation with line ministries. Other ministries with a special role in CBD implementation include the Ministry of Agriculture, Fisheries and Forestry (MAFF), Ministry of Water Resources and Meteorology (MWRM), Ministry of Planning, and Ministry of Rural Development (MRD).

The NEAP provides the overall policy framework for biodiversity conservation. It is supplemented by the National Wetlands Action Plan (1998) and will be further supported by the NBSAP when it is adopted.

### National Environmental Action Plan (NEAP)

MOE was given the mandate to prepare the NEAP in 1996. The NEAP was a mandatory requirement for receiving World Bank Support. USAID provided financial support for the initiative and other international agencies contributed technical assistance through a complex collaboration that made genuine national control difficult. The NEAP secretariat based in MOE conducted interviews, field visits and meetings to gather information and prepare initial draft material. It invited relevant line ministries, such as MAFF, Ministry of Industry, Mines and Energy (MIME), Ministry of Rural Development (MRD), Ministry of Health (MoH), Ministry of Tourism (MoT), Ministry of Water Resources and Meteorology (MWRM) and a number of NGOs to a series of meetings to define key issues and discuss the drafts.

The process of NEAP approval involved three steps:

- a consensus was reached among all concerned ministries on each chapter of the action plan;
- the Environment Minister then signed the document and forwarded it to the Council of Ministers and Prime Minister for endorsement; and
- the National Assembly adopted the NEAP, which was distributed to various agencies and line ministries for implementation.

### Box 1. NEAP action priorities

The NEAP identifies six key areas for urgent action:

- Forestry Policy;
- Fisheries and Floodplain Agriculture in the Tonle Sap Region;
- Coastal fisheries management;
- Biodiversity and Protected Areas;
- Energy Development and the Environment; and
- Urban Waste Management.

The NEAP proposes these areas as the priorities of natural resource management and biodiversity conservation for the period ending in 2002. The NEAP did not detail an action plan for these areas, leaving this to later, more focused, policies such as the National Wetlands Action Plan and forthcoming NBSAP.

### National Wetlands Action Plan (NWAP)

In 1999, in response to international policy commitments, the NEAP and other domestic decrees on the use and protection of natural resources, MOE coordinated line ministries and NGOs to prepare the National Wetlands Action Plan. The NWAP provides a policy framework for the conservation of wetland biodiversity throughout the country.

The process of NWAP preparation was similar to that followed for the NEAP. MOE drafted the NWAP in collaboration with Wetlands International (WI). A number of line ministries, including MAFF, MIME, MOT, MRD, MPWT and MOH, along with NGOs including IUCN, IDRC, Institute of Khmer Habitat (IKH) and the Culture and Environment Preservation Association (CEPA) attended a series of meetings on the draft. Three national workshops were organized by MOE to review the status of wetlands, identify the key issues to be covered by the plan and discuss drafts. The NWAP was finalized (after distribution to sectoral ministries for comment) and then forwarded to the Council of Ministers for endorsement. MOE and WI played the key role in pushing the plan through.

Once the plan is approved by the Prime Minister, MOE will be responsible for coordinating implementation with line ministries. The MOE is required to monitor implementation and report to the government on progress. The NWAP calls on government to establish a National Wetland Committee (NWC) through MOE, MAFF and other concerned line ministries. The committee would develop a National Wetland Policy and promote inter-ministerial coordination and cooperation.



## National Biodiversity Prospectus (NBP)

MOE and IUCN jointly developed the National Biodiversity Prospectus in 1995–96 with assistance from UNDP and AusAID. The prospectus reviews the status of biodiversity resources and defines a system of planning and priority setting through the establishment of biodiversity regions and “clusters” of protected areas. It is the country’s most authoritative document on national biodiversity planning. Cambodia is the only country in the region to have used the prospectus tool as a form of feasibility study prior to undertaking the major consultative task of developing an NBSAP.

The methodology derived from the national conservation strategy prospectuses prepared during the early 1980s in various countries of Asia with support from IUCN. In Cambodia’s case, the time and resources required to prepare the prospectus were greatly underestimated. This led to delays and curtailed the capacity building and consultations which were meant to accompany the process.

The NBP was completed in 1997, and the first proposal to the Global Environment Facility (the Cambodia Biodiversity Enabling Activity Project, to develop the NBSAP) was submitted a few months later. It took two years — far too long — for GEF to arrive at an agreement to support the NBSAP and release funds. Although the delay in fund disbursement was partly the result of political instability in the country, it raises questions about the effectiveness of the GEF mechanisms in responding to urgent biodiversity conservation concerns.

## The legislative context

This evolving national policy framework for conservation is being expressed through a number of laws and regulations to protect the environment and conserve biodiversity, including the Environmental Protection and Natural Resource Management Law (December 1996), the Sub-Decree on Environmental Impact Assessment (August 1999), the Sub-Decree on Solid Waste Management (April, 1999), and the Sub-Decree on Water Pollution Control (April, 1999). The sub-decrees are relatively weak legal tools, however.

A Management of National Protected Areas Sub-Decree was drafted during 1999-2000. It was based on a draft protected areas law, which was prepared during 1996-97 but which did not progress. The Sub-Decree was withdrawn following debate over a new forest sector law prepared by the Ministry of Agriculture, Forests and Fisheries. MOE is again working on a draft Act, which relates to the management of protected areas and defines rights for sustain-

able natural resource uses, prohibitions and restrictions on activities in protected areas, monitoring and inspection, and penalties and fines. Other sectoral agencies are also attempting to develop legal frameworks for promoting the sustainable use and protection of natural resources.

### Relationship to development planning

Donor countries have had a great deal of influence in setting the priorities for economic development for Cambodia. While the majority of people in Cambodia are concerned about the dramatic deterioration of the natural resource base, particularly forests, soils and fisheries, and about political turmoil and associated corruption and their impact on community welfare, these concerns are not well reflected in the country's donor-driven economic strategies. They are aimed at macro-economic and structural reform and the improvement of social welfare.

Macro-economic reform does stress reduction and monitoring of illegal logging and corruption. It promotes fiscal reform and investment to enhance farming production. Structural reforms focus on good governance and public administration, including decentralization and demobilization of armed groups. Improving social well-being concentrates on promoting human rights, human resource development, social welfare and poverty alleviation in rural areas.

#### Box 2. The Public Investment Program (PIP)

The main players in the development planning process are the Ministry of Planning (MoP) and Council for the Development of Cambodia (CDC). An annual Public Investment Program (PIP) is a key policy vehicle for determining budget allocation and the main projects to be undertaken by government. The PIP draws from the priorities set in the Program Level Sector Allocation (2000-2002) and National Budget Law (NBL). The MoP, CDC, and the Ministry of Economy and Finance usually set priorities for the PIP based on proposals from line ministries.

In the past, PIPs have paid little attention to biodiversity issues; past environment policy initiatives such as the NEAP have proceeded parallel to rather than integrated with economic planning. Natural resource protection and biodiversity conservation have not been considered a high priority and continue to receive the smallest budget allocation of all sector activities. The national budget for 2000 was 1.146 trillion Riels with 4 billion riels going to MoE and 26 billion riels to MAFF (US\$1 = 3800 riels). These expen-

**ditures do not reflect government rhetoric, which argues that protection of the environment and natural resource base is a critical element of its development policies. The international lending agencies bear some responsibility for this policy failure.**

In principle, environmental impact assessment (EIA) is mandatory for all development projects. The 1999 EIA Sub-Decree requires all proponents of projects to submit an initial environmental impact statement to the MOE for review to determine whether the project owner will have to conduct a full EIA. If a full assessment is required, an EIA report must be submitted to MOE for examination before development can proceed. Since these requirements have been in place, however, few projects have been subject to environmental assessments, and the law has not been effectively enforced. The government is slowly putting in place the regulatory framework and capacities to ensure that the EIA system will function.

Some NEAP recommendations are being implemented but there is little coordination among line ministries. In the short to medium term, it is difficult to envisage that government will allocate significant budgets to agencies specifically for NEAP implementation as part of their overall development programs. To date donors have provided funding to NEAP projects with modest in-kind contributions from government.

In some ministries, such as MAFF, a major loan supplemented by grants is used to implement key natural resource provisions of the plan. Total commitments to biodiversity issues remain small, however, and links to the NEAP are still unclear.

Because of the intense pressure for economic development and short-term individual gains, forestry policy has favoured large concessions as the main instrument for timber exploitation and management. Forest concessions extend right to the boundaries of the 23 protected areas, with serious environmental consequences. Problems for local communities include loss of access to forests, degradation of watercourses and water quality, increase in barren land, loss of non timber forest products and wildlife corridors and increased illegal logging.

In 1999, MAFF and its Forestry Department launched a forest crime monitoring project (1999-2002) to reduce illegal logging inside protected areas and national forests. A sustainable national forest policy has also been drafted that includes provisions for sustainable use of forest resources. Several

projects have been mounted with assistance from donors for forest and watershed conservation, rehabilitation and wildlife management.

### **Implementation of environmental strategies**

Despite an increasing array of laws, strategies and action plans, little has actually been implemented. Cambodia lacks the human resources, financial resources and administrative capacity for implementation. This, along with limited technical skills, is the main factor inhibiting national efforts to manage biodiversity resources. NEAP implementation is incomplete, ad hoc and subject to donors' sponsoring specific elements. There is no sense of the overall strategic integrity of the plan in its implementation. The following factors aggravate this poor performance:

#### **Absence of cross-sector working links and decentralization**

Each ministry sticks strictly to what they interpret to be their mandate, and this is not well enunciated or understood within or outside the ministries. Moreover, central offices of line ministries prefer to implement projects by themselves rather than helping provincial technical departments take the lead role. This has inhibited the sharing of resources, information and overall delivery of the NEAP, which relies heavily on provincial and district initiative.

#### **MOE's lack of status and authority**

MOE is a new institution with little power to influence other ministries. It has major responsibilities, which has upset some line ministries and constrained collaboration. MOE's ability to promote NEAP implementation is continuously frustrated by a lack of authority and cooperation. This is despite donor support in strengthening the capacity of the ministry and its legislative base.

#### **Reduction in NEAP impact due to unfortunate timing**

The NEAP was launched at an unstable time for the country. After years of internal conflict the economy collapsed and government could not afford to finance ministries to implement the plan. Further, factional fighting in July 1997 led to the closure of many ODA programs and made donors wary about making the long-term commitments needed to provide momentum to NEAP implementation. Donors are now beginning to invest in the country once more, however; initiatives with Danida, AusAID, JICA, MRC, and the EU, for example, are drawing from the NEAP. This modest but renewed flow of resources bodes well for future support of the NBSAP.

## NGOs and international agencies

NGOs have an increasingly important role to play in supplementing capacity in Cambodia's line ministries (many NGOs dealing with natural resources coordinate their activities through the NGO Forum on Cambodia). International organizations are also a critical force in supporting and supplementing the work of government and local NGOs. They include WI, UNDP, FAO, IUCN, UNESCO, the Culture and Environment Preservation Association, Oxfam America, WWF, IDRC, Danida, Wildlife Conservation Society, Flora and Fauna International and RECOFTC. NGOs and international agencies help MOE and other ministries with protected areas conservation, mangrove management, community forestry development, plant assessment and wetland conservation.

Wetlands International provides legal and technical assistance to implement the Ramsar Convention. It has been working with MOE and other ministries on the National Wetlands Action Plan, identifying important wetlands and their subsequent management. IUCN and WWF have a long history of support to Cambodia and technical backing of both MOE and MAFF, and help them fulfil obligations under the CBD and CITES.

UNDP had a longstanding MOE strengthening project, the Environmental Technical Advisory Program (ETAP), and now supports the ministry in implementing the Climate Change Convention through a project involving a range of ministries such as Industry, MAFF, MWRM and Health. UNESCO is helping MOE in managing three proposed Biosphere Reserves. Several large-scale conservation projects were mounted, such as the Cambodian Environmental Management Project (CEMP), the Inventory and Management of Cambodian Wetlands Project (IMCWP), and the Flooded Forest Reforestation Project (FFRP). Danida and MRC funded the IMCWP to help manage Cambodian wetlands along the Great Lakes and the Mekong River Basin.

CEMP was the first environment protection project funded by USAID in Cambodia. It was executed by MOE and implemented by WWF, IDRC, WRI, and CARE and sought to build capacity in community forestry, protected areas management and wildlife conservation. It operated from 1996 to 1997 but was terminated following the 1997 factional fighting.

## The proposed NBSAP

The 1997 Biodiversity Prospectus was the initial step in the NBSAP process. UNDP's Environmental Technical Advisory Project continued this initiative. In 1997 a proposal was prepared and submitted through the Environment Minister for GEF to provide funds to continue the process. The full proposal was

developed by UNDP and FAO (the executing agency), with MOE as the National Implementing Agency. MOE is guiding the process with the close involvement of MAFF and other relevant line ministries. The NBSAP project commenced early in 2000 and has been extended to continue to late 2002, the year the NEAP is due for revision.

### Box 3. Proposed scope and objectives of the NBSAP

The overall objective of the NBSAP project is to “use, protect, and manage biodiversity for sustainable development in Cambodia”. This is addressed through four immediate objectives:

1. institutionalize a cross-sectoral approach to the use, protection and management of biodiversity resources, and prepare a biodiversity strategy and action plan for the promotion of sustainable development;
2. prepare a comprehensive account of the full range of Cambodian biodiversity and its values;
3. develop and strengthen the capacity of Cambodia to organize and plan for effective biodiversity management and to utilize the Convention on Biological Diversity and other environment conventions for this purpose; and
4. develop stakeholder awareness and understanding of the importance and value of biodiversity and responsibilities for its management.

The proposed output of the project is a national biodiversity strategy, which would be the policy framework for a national action plan for biodiversity management. Other results include a greater capacity among involved line ministries in biodiversity action planning, a legal framework, stronger conservation institutions, information dissemination and the ability to monitor biodiversity management. In addition, the NBSAP process has produced a report on the status of biodiversity in Cambodia, and the first national communication to the Conference of Parties to the CBD.

### Box 4. Methodology for NBSAP preparation

The process has involved consultation with a wide range of governmental agencies from national to provincial and local levels. A number of meetings and workshops were conducted to obtain feedback from all relevant stakeholders, including line ministries, academic institutions, NGOs, interest

groups and local communities. The NBSAP must reflect the diversity of participants and ideas. It has been difficult, however, to generate much interest from the business sector given the past lack of attention to conservation by economic agencies of government and business enterprise.

An extensive review was undertaken of past and current development projects that are related to or have an impact on the use and conservation of natural resources. Biodiversity hot spots were identified through expert task forces and workshops, as well as consultation with relevant sectors, including NGOs, private sector and local communities. A hot spot inventory was compiled and criteria set to determine priorities for action.

A draft NBSAP was distributed to involve line ministries, NGOs, private sector and academic institutions for comments. It will be revised and sent to the Council of Ministers for discussion and endorsement, then to the Prime Minister for final approval in mid-2002.

### Financing arrangements

The government has made substantial in-kind contributions to the project, which has a core GEF grant of US\$350,000. Additional funding will be sought from other donors to continue the process into implementation.

### Lessons learned

Lessons of direct relevance to biodiversity planning and management have been learned through recent experience in attempting to prepare and implement various environment policies.

### Importance of central government support

Local government needs strong backing from the centre if it is to contribute to biodiversity conservation. Provinces and districts have received little funding from central government; this has made it difficult for them to contribute to the preparation and implementation of environment management policies or to enforce the regulations under various environmental laws in any substantive way. In fact, local government has scarce financial resources and capacity to contribute to any aspects of provincial and local administration. It has no power to raise money and the national government barely covers recurring costs (for example, salaries and maintenance), let alone funds to provide services to local communities. More importantly, local government will only act by the order of the national government. Without such an order, initiatives at the local level are rarely taken.

### **Need for government leadership**

Government must take the initiative in conservation. At a national level, government has displayed little will or ability to enforce policies and laws, although there are very positive signs that this is changing with increased political stability. Poaching of wildlife and other illegal activities often breach local-level laws, and the local level is the least able to control them. Most protected areas have no management plans or operational budgets. Until quite recently, armed militia usually protected wildlife smugglers and trapped and shot wildlife for food and income.

### **Need for cooperation**

Confusion over mandates reduces the likelihood of concerted action. Misunderstandings and differing interpretations concerning the responsibilities of MOE and the Ministry of Agriculture, Forestry and Fisheries in biodiversity conservation has led to inaction and overlap in fulfilling Cambodia's CBD obligations. The two ministries compete for control of resources and finance.

### **Long-term support**

Long-term and consistent international support for all sectors is essential. International support is needed for each sector to address its biodiversity conservation responsibilities. Providing aid to one agency, such as the MOE or MAFF, and expecting others to participate without specific technical and financial support is not feasible. Sectors may be aware of their obligations but have no resources to meet them. To maintain the momentum of existing conservation initiatives, international assistance must be provided in a timely and consistent fashion. Sharp peaks and falls can do more harm than good.

### **Incorporating international support**

International support should not replace or undermine government functions. For example, the Inventory and Management of Cambodian Wetland Project has a team based at the MOE with counterparts from various ministries working on wetland conservation. The team has taken work away from the Wetland Office in MOE, and has effectively taken over some of the functions of the Fisheries Department (FD). This has all but paralysed the functions of the Wetland Office and upset the FD.

### **Making the military a positive factor**

The military must become a force for biodiversity conservation. To date the military have largely had a negative effect on biodiversity management and have undermined the authority of park staff with local communities. The



collection of firewood and commercial charcoal production within protected areas, for example, poses a threat to remaining forests and wildlife habitats. It is hard to control, especially when it is overseen by military personnel intent on facilitating illegal logging. Park rangers cannot operate effectively in these circumstances. The MOE does not have the power or resources to address the problem.

### Cross sector consistency

For effective biodiversity conservation, policies must be consistent across the sectors which deal with resource management. The government policy on forestry, fisheries and protected areas is not consistent; for example, the article on forestry administration in the draft Forestry Law specifies that the Department of Forestry is responsible for the management of wildlife throughout the country. This contradicts the Royal Decree on Protected Areas Designation that gives responsibility for management, conservation and protection of biodiversity in protected areas to the Department of Nature Conservation and Protection within MOE. Similar problems arise over management control of fisheries and water resources within protected areas.

## Recommendations

**Build collaborative strategies on past experience:** All past initiatives must be reviewed and addressed through the development of the NBSAP. Obstacles and opportunities should be discussed with relevant agencies and sectors so that appropriate collaborative strategies can be developed. This can help provide clarification where stakeholders agree or disagree or where agreement cannot even be reached on the nature of the problem.

**Donors should build sector capacity and have direct links with local government:** Donors need to provide direct assistance to each of the main resource management agencies to assist in building biodiversity strategies and action plans into their regular operations and budgets. Given the need for enforcement and on-site management, donors should also support projects directly at the local level, while ensuring that there are funds to allow local experience to contribute to the national dialogue on biodiversity.

**The mandate of MOE and MAFF should be changed:** MOE's mandate is approved by the government but in practice is not accepted by MAFF. The government should formally review the situation and ensure that there are no conflicts over the mandates of these or any other agencies. This would help provide better coordination, information flow and monitoring of biodiversity.

**Bring the military and the militia into conservation management:** Given that law enforcement is still a vital issue, projects should be mounted at provincial and community level to engage the military, police and militia in biodiversity conservation. They need to be fully involved in protected area management through training and clear definition of responsibilities.

**Government should review laws on natural resource management** to ensure consistency in policy: Some laws are outdated and need to be amended to eliminate overlap, inconsistency and conflicting mandates among government agencies.

**The NBSAP process should emphasize more local and private sector involvement:** The NBSAP project should explore mechanisms to ensure effective participation of local government, local communities, and private sector in formulation of the BSAP. While the need for consultation is recognised in the project document, MOE will need to give special emphasis to broad participation at local level.

### Chronology

Year	Event	Approved by
1987	Decree no.33 on fishery management and administration: protects fishery resources, aquatic sanctuaries and improves annual yields	Prime Minister
1988	Decree on Forestry Administration: protects forest resources, improve timber harvesting, introduce sustainable harvesting of forest resources and conserve wildlife.	Prime Minister
1993	Royal Decree on Designation of protected areas system: protects forest and wildlife inside the protected areas in cooperation with involved ministries and to maintain the ecosystem of the protected areas including wetlands.	King (Head of State)
1995	Joins the Convention on Biological Diversity with aim of gaining assistance from major donors for biodiversity conservation and to reduce illegal activities in the protected areas and trade in prohibited species.	Foreign Minister and later Parliament
1995	Joins Coordination Body of South East Asia Seas (COBSEA) Agreement: protects South China Sea and Gulf of Thailand ecosystems, shares experience and information among signatory countries and receives assistance from them.	Minister of Environment

1996	Law on Environmental Protection and Natural Resource Management: protects the environment, living things and non-living things and associated ecosystems.	Parliament
1997	National Biodiversity Prospectus prepared, an initial step leading to National Biodiversity Strategy and Action Plan Joins the CITES Convention: protects rare and endangered species from being smuggled abroad and exotic invasive species. UNESCO Man and Biosphere Reserve: protects Tonle Sap and its ecosystem, preserves internationally significant waterfowl and flooded forest and maintains sustainable use of the resources by local communities.	Minister of Environment Council of Ministers and Prime Minister Council of Ministers and Prime Minister
1998	National Environment Action Plan (NEAP): protects natural resources, air and water and sets out framework of actions for 1998-2003.	Council Ministers, Prime Minister and Acting Head of State
1999	Sub-Decree on Water Pollution Control: protects water quality in rivers and groundwater for sustainable use. Sub-Decree on Solid Waste Management: protects environment, including groundwater, and promotes recycling. Sub-Decree on EIA: protects natural resources from impact of development projects. Joins Ramsar Convention: protects internationally significant waterfowl, migratory species and wetland resources. National Wetlands Action Plan: protects wetland resources, waterfowl and water quality and improves the sustainable use of wetland resources.	Prime Minister Prime Minister Prime Minister Foreign Minister Will be reviewed and resubmitted*

\* Since the NWAP was delayed at the Ministers Council, MOE (with the support of NRE/DANIDA) withdrew the document for further study.

### Suggested reading

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